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# ● Our Public Lands

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*Fall 1966*

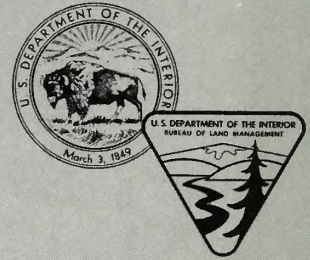
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**Natural Beauty on Public Lands**  
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**DEPARTMENT OF THE INTERIOR**  
Stewart L. Udall, Secretary  
**BUREAU OF LAND MANAGEMENT**  
Boyd L. Rasmussen, Director

Created in 1849, the Department of the Interior—a Department of Conservation—is concerned with the management, conservation, and development of the Nation's water, wildlife, mineral, forest, and park and recreational resources. It also has major responsibilities for Indian and Territorial affairs.

As the Nation's principal conservation agency, the Department works to assure that nonrenewable resources are conserved for the future, and that renewable resources make their full contribution to the progress, prosperity, and security of the United States—now and in the future.

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Franklin Bradford, Editor.

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# NEW DIRECTOR FOR BLM

The Bureau of Land Management, which looks after 460 million acres of public domain in the 11 Western States and Alaska, has a new director.

He is Boyd L. Rasmussen, 53, deputy chief of the U.S. Forest Service since 1964, a professional forester and distinguished civil servant of outstanding talent in the natural resource field.

Appointed July 27 by President Johnson, Rasmussen succeeds Charles H. Stoddard, who has been reassigned to the position of director of Interior Secretary Stewart L. Udall's Resources Program Staff.

Rasmussen brings a wealth of experience, know-how and administrative ability to BLM. As deputy chief of the Forest Service, he has been responsible for the Forest Service operations involving State and private forestry. He was in charge of the agency's cooperative forestry programs and insect and disease control work throughout the 50 States, Puerto Rico, and the Virgin Islands.

"Mr. Rasmussen's long experience with land and resource management, his demonstrated executive ability and his highly developed sense of good community relations make him a natural choice for this new assignment, one of the most challenging in the natural resource field," Secretary Udall said.

Born April 19, 1913, in Glens Ferry, Idaho, he grew up in Ontario, Oreg., and received a bachelor of science degree in forestry from Oregon State University in 1935.

He started with the Forest Service soon after his graduation, at the Pacific Northwest Forest and Range Experiment Station in Portland, Oreg. From 1938 to 1942 he served as district forest ranger on the Siskiyou and Willamette National Forests in Oregon, and on the Mount Baker National Forest in Washington. He worked as timber staff officer on the Umatilla and Siuslaw National Forests from 1942 to 1950, when he became forest supervisor of the Siuslaw National Forest at Corvallis, Oreg.

In 1952 he was assigned to the Forest Service's Division of Fire Control in Washington, D.C., and was promoted in 1954 to assistant regional forester in charge of fire control and State and private forestry programs in the Forest Service Intermountain Region, headquartered in Ogden, Utah. The region covered Utah, Nevada, southern Idaho, and western Wyoming.

He was brought back to Washington, D.C., in 1959 as assistant to the deputy chief in charge of national forest resource management. Two years later he was



Boyd L. Rasmussen

named regional forester in charge of the Northern (Rocky Mountain) Region, in Missoula, Mont., covering Montana, northern Idaho, northeastern Washington and parts of North and South Dakota. He was promoted to deputy chief of the Forest Service after nearly 3 years in the Missoula post.

His wife, the former Dorothy Umphrey, of Portland, Oreg., holds a degree in home economics from Oregon State. Their son, John, is a 1963 graduate of the University of Idaho and is now a lieutenant (junior grade) in the Navy and a pilot instructor at Pensacola, Fla. A daughter, Mary, graduated from the University of Montana in 1965 and is now teaching at Salinas, Calif.

Rasmussen is a Mason, an Elk, and a member of Beta Theta Pi fraternity, the Society of American Foresters, and the American Forestry Association.

## New Wyoming Map Available

Hunters, recreationists, and rockhounds are invited to write for a free copy of a new map of public lands in central Wyoming. Well illustrated and printed in color, the map shows in detail roads, trails, topography, and land ownership in Fremont County. For a free copy write Bureau of Land Management, 2120 Capitol Avenue, Box 1828, Cheyenne, Wyo. 82001.





Things are looking better for the New Mexican duck, because Federal and State agencies are cooperating on a plan to restore some of his marsh habitats.

# QUACK COMEBACK

Cooperative agency efforts may  
reverse shrinking population of  
New Mexican duck

At daybreak you sit quietly under a large cottonwood tree near one of the few marshes remaining in southwestern New Mexico. It is April. Finches build a nest of small twigs gathered from willow trees in the area, and whitewinged doves have established their summer residence. The sudden whistle of wings, reminiscent of a miniature jet diving through the turquoise sky, reminds you that ducks also inhabit the area.

Through field glasses you see several ducks swimming on the small pond—a larger group toward the middle of the pond and a small group near the edge. They look like female mallards. A small cloud shades the sun slightly and you see the lemon-colored bills. You hurriedly record in your notebook—location of the area, time of day, the date, the number of ducks and other information which you can observe. You are looking at a rare species of duck called *Anas diazi novimexicana*. He is commonly called the New Mexican duck, or is he? Others might tell you it is the New Mexico duck, the Mexican duck, the Northern

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By RICHARD M. KERR

Wildlife Management Biologist, Santa Fe, N. Mex.

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Mexican duck, the New Mexican mallard, the New Mexican black duck, or just the black duck. This is only a partial list of the common names attributed to this particular duck. There are probably no more than 250 of the birds in the United States during their peak period of occupancy.

### Decline Since 1940

While New Mexico is the principal habitat in the United States for this threatened species, the duck has ranged over a wider area. Wildlife workers in Colorado have reported it as far north as San Luis Valley. In the middle and late 1940's, the New Mexican duck, which had been common and even abundant in some places in the Rio Grande drainage, began its slow but steady decline toward obscurity. By 1960 it was estimated that the New Mexican duck population was down to about 150 in New Mexico during peak periods. Because of this low population, the New Mexican duck is now considered an endangered species. The duck appeared in the list of rare birds published as a special supplement to the International Union for Conservation of Nature and Natural Resources Bulletin No. 10, January through March 1964. It is also considered an endangered species by the U.S. Department of the Interior. Information provided to the International Union by the Bureau of Sport Fisheries and Wildlife shows that the complete range of the duck is extremely localized in southwestern and central southern New Mexico, southeast Arizona, western Texas, and northern Chihuahua, Mexico. The Bureau estimates between 100 and 150 birds occur in New Mexico in the wild, with very few in Texas and about 20 in Arizona. The species is more numerous in Mexico, but numbers are unknown.

Probable reasons for the shrinking population of the duck are that marshes have been drained, rivers channelized, and water tables lowered by increased well-water pumping. Cattle grazing at critical times and human disturbance probably also have contributed to the decline.

### Preservation Project

Since 1960, William S. Huey of the New Mexico Department of Game and Fish has had a special project for the preservation and management of the New Mexican duck. Huey has been instrumental in capturing and propagating the duck in captivity, starting with five ducklings trapped in San Simon Cienega in 1959 in Hidalgo County. From this small beginning, Huey and others have been able to obtain recently as many as 40 birds from one cooperator, who, along with others, is raising birds for release in the wild.

The Bureau of Sport Fisheries and Wildlife, recognizing the ducks' need for assistance, has begun a propagation program in cooperation with the New Mexico Department of Game and Fish at the Bosque del Apache National Wildlife Refuge.

In the San Simon area, the Bureau of Land Management administers about 600 acres of marsh, which is prime historic habitat for this species. About 200 acres of this habitat lie in Arizona, while about 400 acres are in New Mexico. The habitat has been jeopardized because of low water tables during the nesting and brooding seasons, and for other reasons.

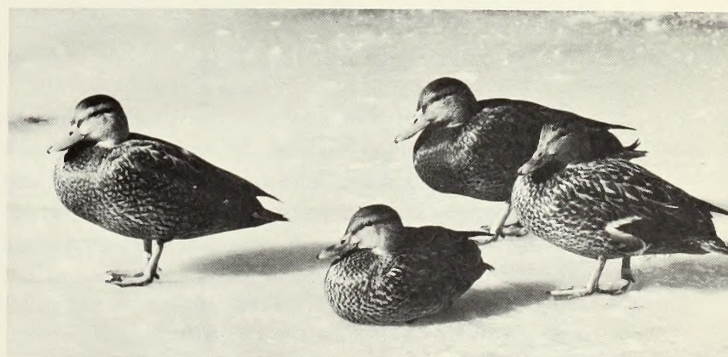
### Cooperative Efforts

Within the last few months, cooperative discussions and inspections have been held with the Bureau of Land Management and the Bureau of Sport Fisheries and Wildlife to determine what is the best course to follow in developing policies and techniques which would provide the San Simon area with management primarily for the benefit of the New Mexican duck. These agencies of the Department of the Interior are devising a basic plan, with the help of the Game and Fish Departments of Arizona and New Mexico, to restore the marsh habitat so that it can again produce significant numbers of New Mexican ducks.

Although no agency or person is seeking individual credit for any accomplishments toward the improvement of duck population and habitat areas, we must recognize that contributions such as Huey's and the New Mexico Department of Game and Fish have been outstanding. They may have averted the extinction of this duck.

Construction has begun on small ponds and a well for nesting and brooding habitat. By 1969 BLM plans to spend approximately \$50,000 for the renovation of habitat. This will be a major contribution to the comeback of the Mexican duck.

Both male and female members of the New Mexican duck family resemble a mallard hen.





# *Is This the Way To Get Rich?*

**Better think twice before plunking down cash for Federal oil and gas lease**

Maybe you've been tempted by a newspaper or magazine ad, or through direct mail solicitation, to buy a Federal oil lease and "get rich." Most of us would like riches; there's nothing wrong in that. In these days of inflation there is a latent temptation to try one's luck.

You might even get rich from a Federal oil and gas lease. But the chances are so slim you'd better think twice, or more, before you plunk down even the \$10 filing fee. Remember, the oil business is one for the pros, not for amateurs, and the most experienced of pros sometimes go from riches to rags in short order. The purpose of this article is not to discourage your enterprise. It is merely to acquaint you with the facts.

Federal oil and gas leases are issued under the Mineral Leasing Acts of 1920 and 1947. Some oil and gas leases may be obtained noncompetitively, others through competitive bidding only. The distinction is this: If the lands to be leased are within a known geologic structure of a producing oil and gas field, they can be leased only through competitive bidding. Lands which are not within such a structure, and which are commonly termed "wildcat" lands, may be leased noncompetitively on a first-come-first-served basis.

## **For Citizens Only**

Only citizens of the United States are qualified to obtain and to hold a Federal oil and gas lease. To determine which Federal lands are available for oil and gas leasing, you must examine the records in the Bureau of Land Management land office having jurisdiction

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By **MICHAEL GILLER**, Chief  
BLM Minerals Leasing Staff, Washington, D.C.

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over the lands on which a lease is desired. An oil and gas lease cannot be obtained simply by writing to the BLM. Land office records are open to public inspection during the usual business hours.

If you determine from the records that a particular tract of land is available for leasing, you may file an "offer to lease" on a BLM form which may be obtained from any BLM office. This "offer" is the same thing as an application for a lease. It must be accompanied by a \$10 filing fee and by payment of the first year's advance rental at the rate of 50 cents per acre or fraction of an acre. It should be borne in mind that if there is any default in the payment of annual rentals, the lease is terminated automatically under existing law.

Lands formerly in leases which were canceled, which lapsed or terminated, become available for leasing through a simultaneous filing procedure. Such lands are not available for leasing on a first-come-first-served basis, but rather by a method calculated to insure that all parties interested in leasing such lands will have an equal opportunity to do so. A description of such lands, together with parcel numbers, are posted every month on the bulletin boards of the land offices. For five days after such posting, offers to lease may be filed on a simultaneous drawing entry card which may also be obtained from any of the land offices. All offers filed during that time are deemed to have been filed at the same time, or simultaneously. If more than one offer to lease is filed for a particular parcel, a drawing is held to determine which of the offers will have priority right to the lease. Copies of the monthly lists showing lands available for leasing may be obtained from the appropriate land office at a small charge. (A listing of BLM land offices and addresses is found on p. 23 of this magazine.)

### Minimum Acreage

An offer to lease may not be made for less than 640 acres, except where a smaller area is completely surrounded by lands not available for leasing, or where the lists of available lands posted in the land offices for simultaneous filings contain parcels of less than 640 acres. Nor may any offers involve more than 2,560 acres. These are the minimum and maximum acreages that may be included in one lease.

Noncompetitive oil and gas leases are issued for 10 years and so long thereafter as oil or gas is produced in paying quantities. If, at the end of the 10th year there is no production from the lands, the lease terminates. There is no authority under the law to grant extensions.

Many people who obtain oil and gas leases don't have the slightest experience with oil and gas exploration, drilling, or production. Their only motive is the laudable one of making a profit, which they hope to realize by selling their leases to oil companies for a cash bonus per acre, plus an overriding royalty in the event of production.

The original holder of a noncompetitive lease almost never engages in his own drilling operations for two reasons: (1) Lack of experience and (2) lack of the tremendous risk capital which such an operation entails. The leasing of lands upon which the expenditure of large amounts of money for drilling would be justified involves the use of considerable technical skill and savvy. Oil exploration is a highly speculative venture. The odds are against a small acreage lessee being lucky enough to strike it rich.

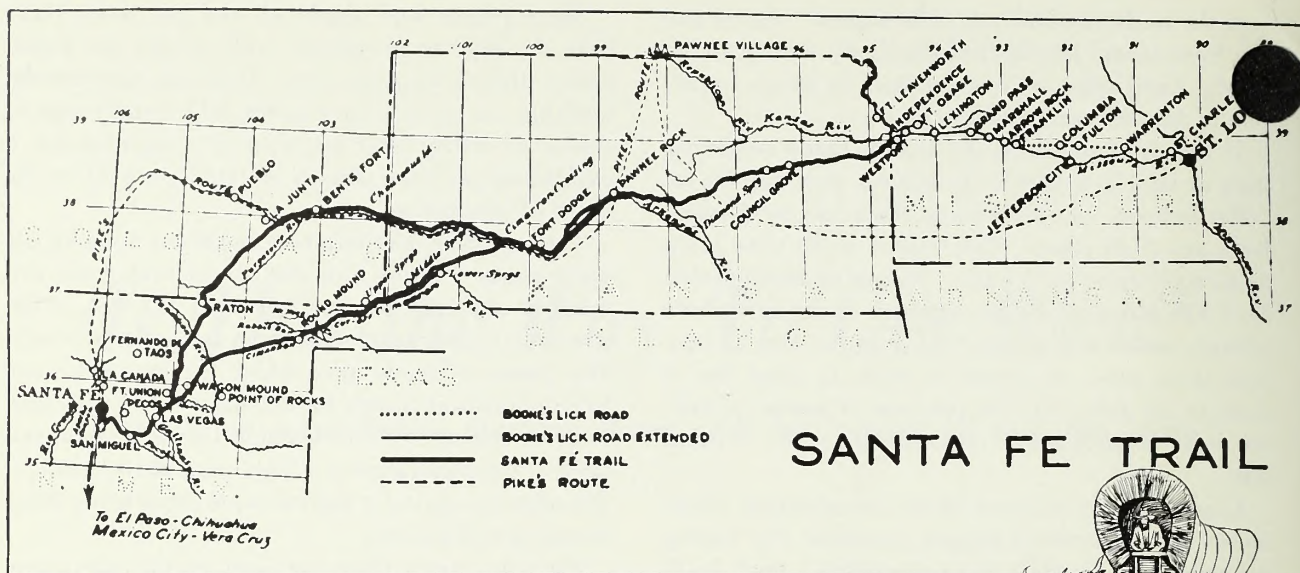
For many years there has been considerable newspaper and periodical advertising offering Federal oil and gas leases for sale. Some of these imply that you may be lucky enough to "strike it rich" by relying solely on the information offered. These advertisers may offer you maps showing oil activities within a particular State. If you cannot distinguish between development and wildcat drilling, or between reality and dreamland, you'd better go easy.

In reality, the intelligent leasing of lands for oil and gas cannot be based on such information, but rather on the use of considerable technical skill and geological knowledge. Such activities require, above all, considerable risk capital. The average layman, inexperienced in the oil industry and ignorant of the time and effort required for the selection of drilling sites, can easily be misled by advertisements which report oil strikes. Forty-acre leases out of 2,560-acre leases are usually sold for about \$100. Since there are sixty-four 40-acre tracts in one 2,560-acre lease, it becomes obvious that the advertisers could realize \$6,400 on an initial outlay of only \$1,280, the first year's advance annual rental and the \$10 filing fee. This is not a bad deal for the advertisers. BLM cannot, under the present law, refuse to approve such partial small-acreage assignments or transfers of leases where all of the regulations are complied with and where the assignee is qualified to hold a lease.

The oil business is challenging, fascinating, and frustrating. Just don't be lured by promises that you may get rich from a Federal oil and gas lease, although it is possible that you could be a terribly long-shot winner. Chances are far greater, however, that you won't realize a dime and that you may never even recover your initial "investment."

Think it over.





# HIGHWAY FOR HOMESTEADERS

Of all the trails of the historic West—from those of early explorers, to routes of settlers and pioneer commerce, to stagecoach roads—none lives more vividly in romance and importance than the Santa Fe Trail. Famous as the first American thoroughfare west of the Mississippi River, the trail originated in Missouri, wended most of its way through Kansas, touched Oklahoma on one of its branches, and ended in the Plaza at Santa Fe, N. Mex. It was a highway to homesteads and commerce in the settlement of southeastern Colorado. For nearly 200 miles, or almost a quarter of its length, the trail passed through the State. Along its route at Lamar, in eastern Colorado, a land office was set up to take care of the influx of homesteading pioneers. Others pushed on to Pueblo where another land office was opened.

At one time pack trains of 50 to 200 mules, each animal carrying 300 pounds of freight, wound along its tortuous way. Later, wagon trains, taking 80 to 90 days and charging \$10 to \$12 per hundred pounds for freight, cut deep furrows of commerce. In 1846 a

single caravan of 414 wagons hauled \$1,752,250 in merchandise to Santa Fe. Then came thousands of homesteaders and a postal route. In 1849 a monthly stagecoach line from Independence, Mo., to Santa Fe was established. It continued for 20 years.

## Historic Horseback Ride

What has been called the greatest horseback ride in history took place along the trail. F. X. Aubrey, a Santa Fe trader, set a record of riding the 800 miles from Santa Fe to Independence, Mo., in 5 days, 16 hours. Aubrey rode six horses to death, walked 20 miles, slept a few hours near Dodge City, Kans., and had to be helped from his horse at Independence.

Famed as an early trading and military route, the Santa Fe Trail became a highway of colonization. After the Mexican War, thousands of settlers, traders, land hungry emigrants, and others followed it to Colorado and New Mexico; other thousands pushed on through the Gila and Mojave deserts to southern California to build another great commonwealth in the development of a nation. Finally, it became the route of one of America's great railroads; now transcontinental highways follow the trail, and jet airline routes crisscross far above its sleeping ruts.

But long before courageous pioneers of the Missouri Valley and other more populous areas to the east faced the hazards of a strange and barren land, Spanish armies of exploration had traveled it. And even before that, it was a highway for Plains Indians en route to trade with tribes of the Southwest.

By **NORMAN W. NOBLE**

Resources Utilization Specialist, Denver, Colo.



### Used by Early Europeans

Perhaps the first Europeans to enter the area were Ponce de Vaca, Coronado, and Luis de Moscoso. De Vaca appears to have traveled through the valley of the Arkansas River, following the route of the Santa Fe Trail to Las Vegas, N. Mex., in about 1536. Coronado crossed the plains of Kansas and probably was in the Santa Fe area in 1540-41 in his search for the mythical Seven Cities of Cibola and Quivera. De Moscoso, who succeeded to leadership of De Soto's command, was also among those early day adventurers along the trail.

The next recorded expedition was a cavan of 1,500 Spanish men, women, and children which left Santa Fe in 1716 to found a military colony in the upper Mississippi Valley. However, they were massacred by the Missouri Indians in eastern Kansas.

Nearly a century later, in 1806, Lt. Zebulon Pike, on an Indian peace mission to Kansas, continued into Colorado. He encountered Spanish soldiers who took him to Santa Fe and to Chihuahua. Publicity of his adventure gave impulse to trade with Santa Fe as American merchants were seeking a route for bringing goods to market there. Prior to this time, goods at Santa Fe came from Mexican seaports and had to be hauled nearly 2,000 miles by mule. Calico, which sold for a few cents a yard in this country, brought several dollars a yard in Santa Fe, capital of northern Mexico.

Santa Fe, founded in 1598, as La Ciudad de la Santa Fe de San Francisco—the City of the Holy Faith of St. Francis—had become a potentially lucrative outlet for Yankee merchandise.

Marked by plaques at New Franklin, near Boonville, Mo., and at Independence, and Kansas City, the Santa

Fe Trail had several beginning points at various times, but only one western terminus, the Plaza in Old Santa Fe. In between were miles of vast, desolate prairie, Indians, and foreboding mountains.

Starting on the banks of the Missouri River, first at New Franklin, then at Independence and Westport Landing, as Kansas City was then called, the trail was responsible for the beginning and early development of the latter. From the Missouri it wound west and southwest 150 miles to Council Grove, Kans., a staging area where pack or wagon trains were assembled and final supplies gathered. From Council Grove it continued southwest to the Arkansas River, near Great Bend, then continued along the river for 135 miles to Dodge City.

### Split at Dodge City

Here it split. The older and more commonly used fork, called the Mountain, or Bent's Fort branch, continued along the north bank of the Arkansas River west to Bent's Old Fort, 7 miles west of the present city of La Junta, Colo., crossing the Kansas-Colorado border between the present towns of Coolidge, Kans., and Holly, Colo. From Bent's Fort it turned southwest up Timpas Creek and crossed the Purgatoire River and followed it to Trinidad, Colo. Beyond Trinidad it went up Raton Creek, over Raton Pass and into New Mexico, entering Santa Fe from the southeast.

Bent's Old Fort was one of three erected by the brothers, Charles and William Bent, but was the only one of significance to the Santa Fe Trail. Completed in 1832 it was the only white settlement within hundreds of miles. With walls 15 feet high and 6 feet thick at

Ruts along the Santa Fe Trail at Fort Union, N. Mex., photographed by John W. Buchanan in 1955. (Library State Historical Society of Colorado photo.)



Traders as well as homesteaders sometimes jammed the route of the Santa Fe Trail as shown in this photo from the Denver Public Library western collection.





the bottom, it was a strongly fortified trading post and had bastions 30 feet high on two corners for riflemen.

Although figuring prominently in the success of the Santa Fe Trail as a rendezvous for emigrant trains, trappers, traders, and army men, nothing now remains of the fort except a low, grass-covered mound. Unable to sell the fort to the Government, one of its owners burned it in 1852.

The Purgatoire River gets its name from a ill-fated Spanish expedition of 1594, leaders of which refused to return to Mexico despite orders of the Governor. Priests left the party to follow the Governor's order. Those who went on with the expedition leaders perished on the banks of the river. It was named El Rio de Animas Perdidas en Purgatorio—the River of Lost Souls in Purgatory. Years later French traders called it simply Purgatoire. Americans anglicized it to Purgatory, and cowboys corrupted it to Picketwire.

### Railroad Follows Old Trail

Today the route of the Santa Fe Trail is followed by the Santa Fe Railroad from Great Bend, Kans., through eastern Colorado and into northern New Mexico. U.S. Highway 50 follows the approximate route of the trail from central Kansas to La Junta, Colo. From there to Trinidad, U.S. 350 is close to the trail, and then south into New Mexico for some distance U.S. 85 follows its route. The trail is among those recommended by Secretary of the Interior Udall for designation as a national scenic trail.

The Cimarron Cutoff, or desert branch of the trail, struck out southwest from Dodge City, crossed arid plains to the Cimarron River, ascended that stream in extreme southeast Colorado, crossed the Cimarron in

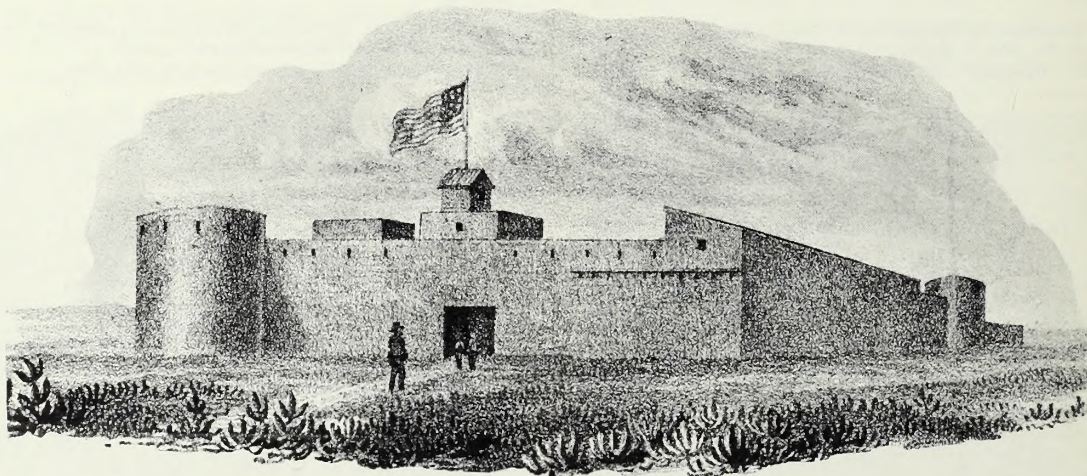
the Oklahoma Panhandle, and entered northeastern New Mexico to rejoin the main branch again at the Mora River. It was 100 miles shorter than the mountain branch but was considered the most dangerous part of the entire journey. Both became famous, but the mountain, or Bent's Fort branch, antedated the Cimarron branch and continued in service after the other fell into disuse.

Although Lieutenant Pike's misadventure into Mexico is credited with providing much impetus to use of the trail, Capt. William Becknell of Franklin, Mo., has been called "the Father of the Santa Fe Trail." In 1821 Becknell set out with a party to trade with Indians. However, he wandered on to Santa Fe before disposing of his wares and was welcomed by the Spanish who valued his hard-to-obtain merchandise. Becknell returned again the next year and opened the Cimarron Cutoff, driving the first wagon train along the route.

This started a caravan trade that lasted more than 40 years but does not entirely cover the span of the trail's importance. The first pack mule train along the trail was led by Robert McKnight, Franklin, Mo., in 1812, and it was followed by many others before Becknell drove his first wagons through.

From pack mule to wagon train, to stagecoach and homesteader's wagon, down through those years and all along the hundreds of dreary, dangerous, dusty miles wound a kaleidoscope of America in the making—pioneer farmers, merchants, and adventurers forging their way southwestward to a new land in an expanding nation.

The Santa Fe Trail is no more. Across the land its ruts and cuts grow dim, but in a nation's heritage, it is etched indelibly.



Bent's Fort in Colorado was a key point along the Trail. This sketch was drawn at the fort in 1845 by Lt. J. W. Abert, Corps of Topographical Engineers, U.S. Army. (Library, State Historical Society of Colorado photo.)



**BLM reforestation supervisor  
hurdles language gap in  
getting a job done**

## **TONGUES and TREES**

By **FREDERICK T. COOK**

You've heard about the three blind men trying to describe an elephant, but have you ever tried to describe a simple chore, such as how to plant a tree, when you can't even understand, or be understood, by the people you are talking to?

Well, this is the job that faced the reforestation supervisor in the BLM Coos Bay District.

Lloyd Koepke employed six Russian refugees for his planting contract on Hungry Mountain.

The men, ranging in age from 16 to 53, speak four languages, but English is not one of them.

Fortunately, Koepke got a badly needed assist from

Eriks Abolins, a Latvian BLM employee who speaks and understands the Russian language. An officer in charge on the planting site, Abolins bridged the gap in communications.

The Russians, whose homes now are in the Gervais-Woodburn area, were hired by Koepke after they were recommended by a friend in a casual conversation about the difficulty of finding reliable and steady workers for such jobs.

Savely Molodyh, 53, oldest member of the work force, was accompanied to the Coos Bay Area by his son, Ivan, 17; Efim and Feodor Chernizhoff, 17 and 19; Grigory Iosif, 23; and Paul Barsukoff, 16. Paul is the only one who speaks and understands even a smattering of English, though not enough to enable him to understand instructions on the job.

The elder Molodyh was born in Russia and escaped with his family after the Russian revolution while he was still a small child. With others who left the country at the same time, the Molodyh family established a home in Sinkiang Province of northern China.

Since the province is so far from the center of government, the Russians found "small rebellions" in various cities caused changes in governing bodies. They felt it more expedient to leave China than to remain under worsening conditions.

The younger men were all born in China and were among those who fled to Brazil after permission was granted in 1959 or 1960.

Emigration to the United States was prompted by the tropical climate in the South American country, which the refugees found too warm for comfort. Another factor was that below the equator, the sun's rays strike from a different angle than in the Northern Hemisphere. This was explained by the men with a great many gestures and a flood of words to the interpreter.

Oregon is more to their liking; the climate is "very good, but not enough snow."

The Russians have been in Oregon for several months. They were attending regular English classes when they were hired for the job.

They are finding English about as hard to learn as the Chinese language, according to Molodyh, who said it's about "the same—Chinese or English." They also speak Portuguese and Spanish.

As members of the old Russian Orthodox Church, the men grow beards, following the church's belief and the example set by Christ.

Abolins said that he has found the workers to be very industrious. "Just show them what to do and they do it," he said.



Efim Chernizhoff and Grigory Iosif get tree-planting instructions from Lloyd Koepke, tree-planting contractor.





Perhaps America's greatest untapped recreation opportunity lies in the desert areas.



Remnants of a miner's abandoned cabin in Colorado's Lake Fork area.



Through the public lands flow some of the finest trout fishing streams in the world.




Wild flowers add to Nature's handiwork throughout the public domain.



Left, the American cowboy, idolized throughout the world, is still a reality on the public lands. Right, an alpine meadow in the mountains of Wyoming means good grazing for a herd of elk.





This bit of scenic grandeur from Alaska shows a portion of Yentna Glacier with Mt. Foraker in the background.

## NATURAL BEAUTY *on Our Public Lands*

The public domain—460 million acres in the Western States and Alaska—contains great vistas of natural beauty. The preservation and restoration of this beauty are functions of the U.S. Department of Interior's Bureau of Land Management. The Bureau's action program embraces the removal of billboards, junk heaps, and unsightly installations; protection of the land from damage by mining and geophysical exploration; creation of scenic corridors, or buffer zones, to accentuate beauty along highways, roads, streams, lakes, and reservoirs; preservation of areas having archeological, historical and cultural values; designation of outstanding water areas; restoration of "frail" lands gullied by centuries of wind and water erosion; and identification of primitive and natural areas for permanent protection. These activities, and others, preserve and enhance natural beauty on about one-fifth of our total land area. This land is now managed for all its uses and provides our greatest heritage, "room to roam."

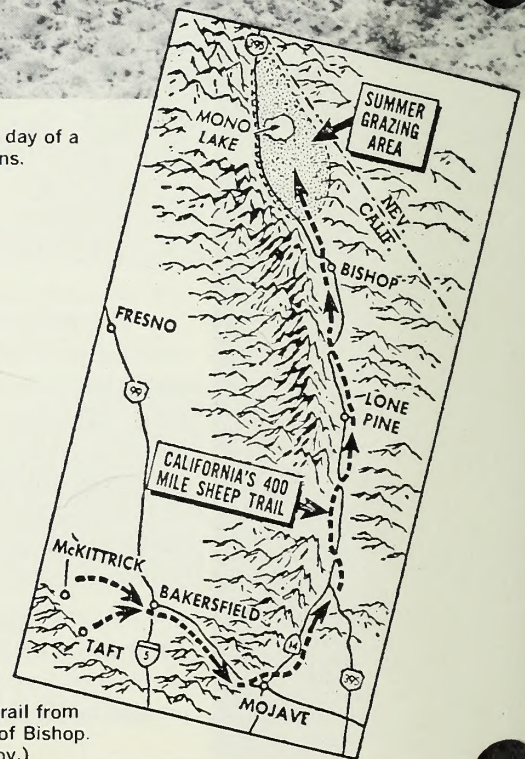


# WOOL WALK



Shepherders follow 1,500 sheep through Owens Valley in California on the 31st day of a 400-mile trek that started in Taft, Calif. In background are the White Mountains. (Los Angeles Times photo.)

**Basque shepherds  
drive sheep 400 miles  
over century-old California Trail**



**LONG TREK**—Map of 400-mile sheep trail from Kern County to the grazing area north of Bishop. (Los Angeles Times map by Harlan Kirby.)



Basque shepherds walk their flocks 30 to 40 days, 300 to 400 miles along the half-mile-wide century-old California Sheep Trail that extends from the west end of Kern County to Bodie, a ghost town above Mono Lake, on the California-Nevada border. It's one of the longest annual animal drives in the Nation.

Mile-high meadows in narrow Owens Valley on the slopes of the Sierra Nevada and White Mountains were summer grazing lands this year for 75,000 sheep.

"Main thing for driving the animals to the high meadows is that the wool grows better," said Frank Noriega, a Basque who had 3,000 sheep on the trail.

"The animals get the benefit of quick breeding and there's much more twinning with the pregnant ewes."

### Average 8 to 10 Miles a Day

Basque sheepherders this past summer averaged 8 to 10 miles a day trailing sheep from Taft, McKittrick, and the Bakersfield area through Tehachapi Pass to Mojave.

From Mojave they walked north, each shepherd with his band of 1,200 to 1,800 sheep, 2 burros, 3 lead goats, and a sheep dog.

The trail marked and set aside by the Bureau of Land Management leads through the Mojave Desert near Highway 14. It follows Highway 395 and the Los Angeles Aqueduct wending its way to lush meadows and forests that lie between Lake Crowley and Mono Lake and Bodie.

Noriega owns the sheep company that bears his name. His shepherds trail half his sheep to the high meadows and tend the balance grazing in barley and sugar beet fields near Taft.

In his younger days, Noriega, a Bakersfield municipal judge, walked bands of sheep on the 400-mile trail as his father did before him.

### Grass Protected

The dozen outfits walking sheep over the long trek pay the Government 10 cents a head to use the historic trail. They agree to move their sheep at least 5 miles a day, so no one band cleans out sections of the trail.

As sheep walk, they feed—in desert portions of the trail, on weeds, shrubbery and brush, in higher country on grass.

"We walk animals rather than truck them because of the economics," said Judge Noriega. "Of course, we wouldn't run any of them on the trail if it didn't pay off."

He said by trailing his 3,000 sheep nearly 400 miles he saves \$10,000—the cost of trucking the same number of animals from Taft to Crowley Lake.

"We will truck them back about November 15 because by then the ewes will be heavy with lambs and the feed will be gone on the trail."

Basque shepherds wear out a pair of heavy shoes every 10 days as they trail sheep through rock-strewn desert brush.

### Water for Animals

Servicing Noriega's two bands is an 1,800-gallon water truck. Troughs are lowered from the truck each night to water the animals. Another truck follows to pick up footsore or weary animals, with 20 to 30 carried ahead each day to evening camps.

Each year 300 to 400 Basque shepherds are flown to western sheep range country from the mountains straddling Spain and France. They sign 3-year contracts (\$230 a month plus all expenses) to tend flocks.

"The Basque shepherd spends little of his earnings. He banks almost every dollar. After 3 years he goes home with \$6,500 to \$7,000," said Judge Noriega.

"He may return for another 3 years. After 6 years with the sheep in America he returns to his Pyrenees home with \$18,000 to \$20,000. He buys a little ranch and lives comfortably the rest of his life. With that kind of money he is a man of means in his homeland."

### Finest Sheepherders

For centuries the Pyrenees Mountains have produced the finest sheepherders.

These are the sounds of a Basque sheep camp: Bells around the necks of burros and goats clang, shepherds whistle, sing, and shout commands. Sheep dogs race around the animals barking in response to the shepherd's hand signals and verbal commands.

At dusk the shepherd unloads his leather pack bags from the burro and sets up his tent and cot. He butchers an animal and hangs it overnight. The next morning he cuts it up for food.

In his bags are pots and pans, a 3-gallon keg of burgundy, sheepherders' bread, canned food, and a goat-skin bota for the wine.

When the trek ends, breeding season begins. Lambs will be born shortly after ewes are trucked back to Kern County in the fall. Sheep are shorn the following March at the same time young lambs are marketed.

Many ewes walk the trail seven times in 7 years—then they are taken to market.

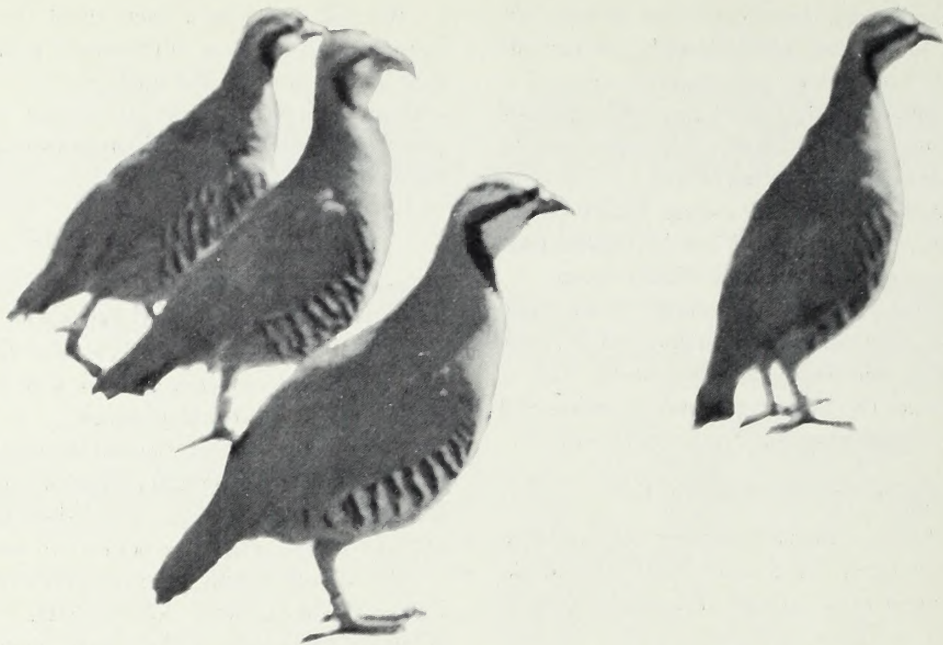
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By CHARLES HILLINGER

Los Angeles Times Staff Writer

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# HAVE LEGS, WILL TRAVEL

*Imported from the  
Himalayan Mountains of India,  
the chukar partridge is  
No. 1 game bird in Nevada*

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By GENE McDOWELL

Public Information Officer, Nevada Fish and Game Commission

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PROBABLY THE MOST discussed and cussed upland game bird in Nevada is the chukar partridge (*Alectoris graeca*). He runs like a racehorse (always uphill), flies like an F-100 jet and has eyes like a hawk. With the exception of the blue grouse he is one of the most difficult birds to hunt, a real challenge for scattergunners.

An import from the Himalayan Mountains of India, he was first introduced into the United States in 1893 when five pairs were released in Illinois. Following this introduction, a majority of the States attempted to establish the species, but greatest success was experienced in states west of the Rocky Mountains.

The first known introductions of chukar into Nevada were made in 1935. During that fall 289 chukar were distributed in 9 of Nevada's 17 counties. Birds for these releases were made possible through the efforts of two interested residents of Fallon, Nev., who received funds from the Nevada Fish and Game Commission for the project of hatching and rearing the chukar. Today the chukar is established and hunted in all counties of the State.

## Harvests Run Heavy

It is interesting to note that Elko County, in northern Nevada, one of the last counties to receive "plants" of wild trapped birds in 1959, recorded the State's highest harvest in 1964, when some 43,000 birds were taken.



## Hunted at Waterholes

The chukar is regarded as one of our most challenging game birds. While there are many methods employed in hunting him, none seem easy except during a dry year when birds may be concentrated in areas of dependable water seeps and springs. When these conditions exist, hunters wait at the waterhole for the birds to fly in during midmorning or late afternoon. This is not the most sporting method, but it does produce birds in the bag and to some hunters this is more important than the sporting aspect. With the advent of the four-wheel drive vehicle, hunters became lazy and drove the trails and ridges, stepping out only at the sight of a covey of birds.

Numerous devices for calling the chukar have been used but none have met with great success. At best they serve only to locate the birds or to learn if birds are in the area. Veteran chukar hunters will tell you that locating the birds is only a small part of the battle; getting close enough for a shot is something else.

Hunting seasons which follow wet summers and fall months have proved to be the most challenging. During the 1965 seasons, hunters arrived at their choice springs, seeps, and waterholes to find these supplemented by additional water supplies, and old springs, dry during past years, running full. They found birds well scattered and generally at higher elevations. With an abundance of feed and water, chukar at higher elevations found themselves relatively safe from the average hunter. However, the hunter who worked the high country was successful in bagging his daily limit of 10 birds.

## Fall Green-up Helps

Many factors seem to influence chukar populations from year to year, most important being moisture and feed. Glen Christensen, wildlife specialist for the Nevada Fish and Game Department and one of our country's prominent authorities on the chukar as well as other exotic species, feels that the fall green-up is most essential to the following spring and summer population. The chukar is a most hardy and durable bird but without the green-up during October and November to carry him through severe winters, his numbers would drop drastically.

Hunting pressure doesn't seem to affect chukar populations. His ability to withstand the most adverse weather conditions, plus his built-in reproduction barometers, maintain him as No. 1 game bird on Nevada's public lands.



Chukar transplants, or releases, are made only after extensive studies of suitable habitat.

Since the initial stocking of game-farm-reared birds, subsequent releases of game farm birds and transplanting of wild trapped birds totaling approximately 10,000, over 600,000 have been harvested.

Nevada probably has experienced the most liberal seasons and bag limits than any of the chukar States during recent years. An abundance of birds has made possible 120-day seasons with bag and possession limits varying from 8 and 16 to 10 and 20. The State's highest harvest occurred in 1964, when hunters reported taking some 175,500 chukars during a 130-day season.

Today the chukar ranks as Nevada's No. 1 upland game bird. In many other western public land States, he is gradually approaching that status.

The success of the chukar in other of our Western States can be noted by the many articles appearing in popular outdoor magazines during the past few years.

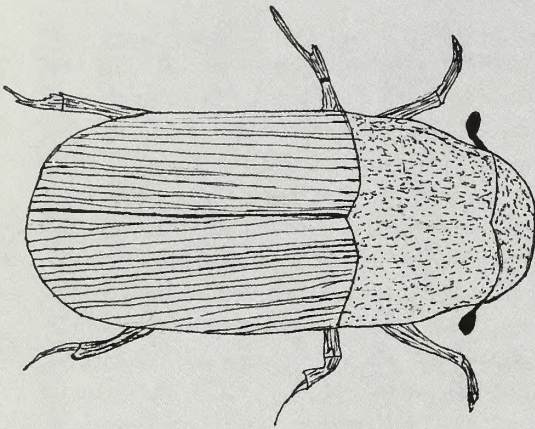
### Summary of Statewide Harvest, 1951-64

1951-----	36, 184	1958-----	118, 650
1952-----	43, 742	1959-----	19, 648
1953-----	18, 090	1960-----	52, 249
1954-----	No season	1961-----	34, 374
1955-----	1, 120	1962-----	63, 812
1956-----	12, 655	1963-----	127, 008
1957-----	55, 660	1964-----	175, 571



# BEETLEBOMB

*Will it explode again in the Black Hills? Time and the extent of forest management will tell*



The beetle—killer of trees.



Closeup of beetle egg and larvae galleries in the cambium layer, between the inner bark and the wood.

Silent are the barroom guns of Gold Rush days, but Deadwood, S. Dak., and its environs still sit on a veritable time bomb, only this time it's bugs instead of badmen that threaten to "explode."

In September 1959, a forest fire almost wiped the town off the map. It was started by a man burning newspapers behind his garage. In a matter of hours, more than 4,500 acres of timber-covered hillsides were left black and smoldering. Millions of board feet of timber had gone up in smoke.

Now the tiny, quiet villain, killing tree after tree, is the Black Hills beetle. The Black Hills have been plagued with serious beetle outbreaks since the late 1800's. It has been estimated that the beetle, during the 1895-1908 outbreak, killed 2 billion board feet of ponderosa pine; hence the name Black Hills beetle. Since this catastrophe, outbreaks have been less de-

structive, yet frequent.

In 1962 Black Hills beetle populations began to increase rapidly. By 1963, large groups of beetle-infested trees were found throughout the northern Black Hills. It was apparent that unless suppression measures were undertaken, the outbreak could develop into another catastrophe. The Black Hills beetle is the most aggressive and destructive of all the bark beetles and a serious enemy of pines throughout the central Rocky Mountain region. Not only does the bark beetle kill vigorous trees outright, but it carries a blue-staining fungi into the tree which rapidly permeates the sapwood, rendering the wood undesirable for pulp.

## **"Beat the Beetle"**

Faced with this beetle buildup, State, private, and Federal foresters combined forces, geared up, and declared war. "Beat the beetle" became their war cry.

Forest management on public domain comprising

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By WES MORRISON

BLM Forest Protection Specialist, Billings, Mont.

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some 5,000 acres had been almost nonexistent until 1963, when the Makotapi Project Office was opened to look after BLM lands in South Dakota. The stands of pine are so dense that tree growth is pretty much stagnated. In order to provide a reliable estimate of the overall infestation, and to justify a request for forest pest control funds, a preliminary light timber cruise was performed by BLM foresters mustered from several Montana districts.

On the basis of data obtained from all sources, "hot spots" were located and treating priorities established. Cruise data showed that an intensive survey was necessary. All public domain in the exemption area was then surveyed thoroughly with the exception of some

It will not save a tree, but it kills larva, pupa, and adult beetles before they can infest other trees. Debarking was effective, but slow, expensive and usable only on thin-barked or relatively small trees.

Infested trees were sold on a negotiated timber sale contract basis after competitive buyers were found. The difficulty in finding reliable operators willing to handle small sales within the specified time, and other administrative disadvantages, precluded use of the timber sale procedure for disposal as an effective means of control. Piling and burning were the fastest, most efficient, economical, and effective means of control.

Three control seasons have been completed by BLM foresters against the Black Hills beetle. Over 14,000



One of the methods of beetle control is chemical spraying of the felled trees. Here a worker turns an infested log after the "upper face" has been sprayed.



First phase of beetle control is the "spotting" of infested trees by crews of three to five men.

isolated parcels varying in size from 10 acres to fractions of an acre. Results of the 100-percent cruise showed more than 11,000 trees were infected and in need of immediate treatment.

"Guess we're pretty lucky to have any timber left to manage," remarked Dick Johnson, BLM forester in charge of the Bureau's Makotapi (S. Dak.) Project Office as he surveyed the fire-damaged areas and the very evident "red tops" of the dead and dying beetle-infested trees.

### Infested Trees Sold

To check the beetle outbreak, BLM foresters disposed of infested trees by timber sale, piling and burning, debarking and chemical treatment. Within each basic method, many variations in field techniques and administrative handling met with varying degrees of success.

Chemical spraying using ethylene dibromide, while effective, was considered more of a preventive measure.

infested trees have been salvaged or treated by burning or chemical spraying. The epidemic has been reduced to an endemic state. It is now felt that natural control will help keep the beetle populations in check through 1966.

### Victory for the Present

BLM, other Federal and private foresters have won a battle. At least for the present, the enemy has been reduced to an endemic level. However, land managers cannot relax. The beetle has been a problem for the past 70 years. There are over 300,000 acres of overstocked stands of pine in the northern hills, ideal host material for the beetle. The time bomb is ticking, and the big blast can come again as it has in the past. Where will the next staging area be? A concerted effort must be continued by all land managers of the area to bring these stands under management, or perhaps in the future again we will hear and read, "Two Billion Board Feet of Ponderosa Pine Threatened."



# ANCIENT ANASAZIS of ALKALI RIDGE

**THEY LIVED HERE FROM ABOUT 800 A.D.  
TO ABOUT 1300 A.D.**

Alkali Ridge, some 10 miles from Blanding in south-east Utah and a rare archeological key to prehistoric cultures of America, has been designated a national historical site. It was excavated between 1931 and 1933 by the Peabody Museum of American Archeology and Ethnology, Harvard University.

Alkali Ridge is one of the sites where a full range of cultures from Basketmaker to Pueblo II is found; where pottery covers a wide range of types and styles; where social cultures are prekiva and kiva periods; where dwellings evolve from below-ground types to multistoried structures above ground. With ruins and relics available, it is easy to conjecture about lives and habits of the "old ones" of Alkali Ridge, who once were part of a people far outnumbering the region's present population.

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**By SANDY ROLFSON**  
Forester, Monticello District, Utah

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The Navajo gave these ancient people the name of Anasazi, or the "old ones." Some believe that the ancestors of the Anasazi came from South and Central America; others believe they came from the north, the Bering Sea. It is generally believed that the people of Alkali Ridge were ancestors of the Pueblo Indians of New Mexico and Arizona. The Pueblos still practice many of the early arts and crafts and live in farming villages similar to dwellings the Anasazi used a thousand years or more ago.

## **Occupancy Dates**

Alkali Ridge and the surrounding region were occupied by Anasazi from about 800 A.D. until about 1300 A.D. Until they disappeared en masse—perhaps because of raids by war parties or, more likely, because of extended drought.

These people advanced through various stages of culture. They moved into the area during the last part of the period known as the Late Basketmaker III (600–700 A.D.) and Pueblo I (700–900 A.D.), when they lived in pit houses, and, later, in semisubterranean pole and mud-walled houses. They advanced through Pueblo II (900–1100 A.D.) and developed masonry-walled houses of single-story rooms, and then into the Pueblo III period (1100–1300 A.D.) during which multiple-story, above-ground dwellings appeared.

Archeological excavations in the 1930's were made under direction of Dr. J. O. Brew at 13 sites on Alkali Mesa. Site designated No. 13 was the most extensive in numbers of dwellings or rooms and revealed the longest continuous period of culture. Some 200 rooms, including pit houses, storage rooms, above-ground dwellings, and "kivas," were found. These rooms were

Chris Rolfson, 9, and Darwin Nelson examine a line of protruding rocks, part of a wall of a prehistoric dwelling on Alkali Ridge.





arranged in contiguous rows which formed three-sided  
as of which there were at least four.

It was on Alkali Ridge that the ceremonial room or  
"kiva" is believed to have evolved.

Indications from social customs are that a form of  
matriarchal ownership existed. A bridegroom moved  
in with his wife's parents, with the wife and her female  
relatives owning the real property. Perhaps this was  
frustrating to the men, and in attempts to preserve their  
dignity, the husbands decided to build a room of their  
own—a men's club—no women allowed.

### **Women Barred**

Maybe at first religion was used as justification for  
barring the women, and over a period real religious  
meanings were attached to the rooms. Every home or  
village had at least one kiva of the same basic design—

underground if possible—with ceremonial shelves and  
cubicles.

Before the excavation of this site, it was believed the  
Basketmaker and the Pueblos were of different ancestry  
because of the shape of their heads. The Pueblos  
showed a head longer and flatter in the back. Findings  
at site 13 on Alkali Ridge, however, indicated they are  
the same people with the head shapes changing because  
of the adoption of the cradle board which caused the  
head shape found in the Pueblos. The same type of  
cradle board is used by Pueblos today.

Much is still unknown about the prehistoric inhabi-  
tants of the Four Corners area. But, a great deal more  
is known since excavation of site No. 13 on Alkali Ridge  
in San Juan County, Utah.

To identify the significant find, the Bureau of Land  
Management arranged for placing a marker near the  
area.



## **NEWS NOTES ON WORK OF THE PUBLIC LAND LAW REVIEW COMMISSION**

### **Series of Public Meetings**

With public meetings already held in Salt Lake City,  
Alaska, and Boston, the Public Land Law Review Com-  
mission is striving to hear directly from the people  
who use the public lands. These meetings provide a  
forum not otherwise available to individuals most inti-  
mately concerned with the Commission's work.

Future meetings will be held in Albuquerque, N.  
Mex., Seattle, Wash., Sacramento, Calif., Palm Springs,  
Calif., Atlanta, Ga., Billings, Mont., and possibly other  
cities.

### **Advisory Council Meets in Denver**

The Advisory Council met in Denver on September  
16 and 17 with the Commission and representatives of  
the 50 State governors. The Council comprises 25  
persons who are representative of the various major  
citizens' groups interested in public land problems, plus  
eight Federal liaison officers who represent those agen-  
cies having responsibility for public land management.

### **Cornell Professor to Author History**

The Commission has retained Dr. Paul Wallace Gates  
of Cornell University to compile a definitive history of  
public land policy development. This is the first formal  
study to be launched by the Commission. Dr. Gates'  
study will be concerned with the development of pub-  
lic land laws in the context of the social, economic and  
political aspects of the United States. It will dovetail  
with a separate review of the interpretation and admin-  
istration of acts of major significance.

Dr. Gates, a John Stambaugh professor of history  
at Cornell, is the author of numerous texts and articles  
in the field of public land history, including: "Fifty  
Million Acres; Conflicts Over Kansas Land Policy";  
"Frontier Landlords and Pioneer Tenants"; "The Illi-  
nois Central Railroad and Its Colonization Work"; and  
articles treating on Federal land policy, disposal of the  
public domain, the homestead law, land speculation,  
California settlement, private land claims, and many  
other subjects.

### **Overall Program Paper**

The Commission has developed a program paper  
setting forth its objective, functions, and operations.  
The program is designed as an overall blueprint for  
the work of the Commission, thereby providing a guide  
to the planning activities of the staff. The paper has  
been published by the House Interior and Insular  
Affairs Committee as Committee Print No. 21, dated  
June 3, 1966. A limited number of copies are avail-  
able at the Commission on request.



# PUBLIC SALE BULLETIN BOARD

*This is a compilation of the most up-to-date information possible on transactions and future sales of public lands by land offices of the Bureau of Land Management. Any details on land descriptions, prices, and other information pertinent to sales must be obtained from the individual land offices. When possible, all sales are scheduled far enough in advance so ample notice can be given in Our Public Lands. Any sale listed can be cancelled on short notice, due to many administrative and technical reasons, so interested purchasers should always check with the local land office. A listing with addresses is found on the opposite page.*

## CALIFORNIA (Riverside Office)

### *Small Tracts*

The southern California small tract program continues to offer 200 tracts of 2½-5 acres each at the weekly small tract auctions held Wednesdays in the Land Office. The tracts are all in the desert area of San Bernardino County's small towns except for two located in Riverside County.

Twelve different areas are represented by the listings, giving a good choice between high or low desert, or close-in versus remote locations.

### *Public Sale Tracts*

Two tracts in San Diego County, a 40-acre parcel appraised at \$6,400 and an 8.58-acre parcel appraised at \$14,400. Two other parcels, located in San Bernardino County, east of Barstow, are a 176.85-acre parcel appraised at \$28,300; the other is 171.29 acres appraised at \$27,400.

## CALIFORNIA (Sacramento Office)

### *Public Sale Tracts*

650.08 acres, about 10 miles northwest of Herlong and 40 miles northeast of Susanville, Lassen County. Appraised value \$19,500.

40 acres, 8 miles south of Alturas, Modoc County. County road access. Telephone right-of-way reservation. Appraised value \$5,000.

160 acres, about 18 miles southwest of Willows, Glenn and Colusa counties. Appraised value \$4,000.

120 acres, 20 miles west of Maxwell, Colusa County. Appraised value \$4,800.

80.14 acres, about 2 miles west of Guinda in Capay Valley, Yolo County. Appraised value \$1,845.

## COLORADO

### *Small Tracts*

2 lots, South Fork area, .60 of an acre to 2.41 acres. Relatively flat with a few native shrubs and grasses. No trees. At junction of paved Highway 160 at South Fork, 16 miles west of Del Norte, Colo. Appraised value \$600 to \$2700.

5 lots, Boulder area, along Sunbeam or Packer Gulch. Area rough and rocky with moderately steep to very steep slopes covered with lodgepole and ponderosa pine.

## IDAHO

### *Public Sale Tracts*

#016984: 40 acres, 10 miles northwest of Minidoka. Undulating with shallow, natural drainage. Soils sandy, silt loam. Cheatgrass, forbs. Fairly suitable for farming, but water needed for irrigation. Good access. Appraised value \$2,000.

#015754, Parcel 7: 198.45 acres, 5 miles northwest of Aberdeen, Bingham County. Silt loam, surface rock and rock outcrops. Sagebrush-grass, suitable for grazing. Appraised value \$3,200.

#015754, Parcel 11: 200 acres, 7 miles west of Aberdeen, Bingham County. Access. Silt loam soil varies in depth. Sagebrush-grass plant cover. About 44 acres have farming potential. Appraised value \$2,000.

#015766, Parcel 4: 40 acres near Idaho Falls, in Henry's Fork drainage, Bonneville County. About 3 acres can be dry farmed. Remainder steep. No direct access. Appraised value \$480.

#015766, Parcel 6: 40 acres near Idaho Falls, Bonneville County. About 6 acres could be dry farmed. Remainder varies from gently sloping to very steep. Dirt road within few hundred feet of northwest corner. Appraised at \$600.

#015883: 120 acres, 9 miles east of Salmon, Lemhi County. Surface steep, mountainous. Sagebrush, bunch grasses. Usable for grazing. No direct access. Appraised value \$1,200.

#16007, Parcel 5: 40 acres, 7 miles west of Leadore, Lemhi County. 20 acres in subirrigated pasture; 12 acres creek bottom, 8 acres in dry grazing. Pasture grasses, alder, willow and sagebrush. Traversed by Big Eight Mile Creek. Appraised value \$3,240.

#016310, Parcel 4: 40 acres, 5 miles south and 4 miles west of Nampa, Canyon County. Silt loam, some lava outcrops. Rolling with high rocky point. Mainly cheatgrass; about 27 acres have irrigated farming potential. Appraised value \$2,000.

#016310, Parcel 10: 240 acres, 2 miles north and 3 miles west of Melba on Hat Butte, Canyon County. Modestly steep with rocky hillside. Sagebrush and cheatgrass cover. 40 acres have irrigated farming potential. Rest usable for grazing. Near paved road. Appraised value \$8,800.

#016310, Parcel 13: 160 acres, three miles north, one mile east of Melba, south side of Powers Butte, Canyon County. General rolling, some slopes. Sagebrush-cheatgrass. Near gravel road. Irrigated farming potential. Appraised value \$6,600.

#016384, Parcel 20: 80 acres, 2 miles north of Tabor. U



dulating, rock outcrops. Shallow soil, suitable for grazing. Access. Appraised value \$880.

#016384, Parcel 21: 40 acres, 2 miles north of Tabor. Near county road. Suitable for grazing. Appraised value \$440.

#016384, Parcel 23: 165.47 acres, 5 miles southeast of Tabor. Shallow and rocky, silt loam, sagebrush. Suitable for grazing. Appraised value \$1,820.

## MONTANA

3 tracts isolated, extremely steep to gently rolling, non-commercial timbered range lands, 13-15 miles southwest of Roundup. Access by jeep trail over private lands except state highway crosses corner of one tract. Native grasses, no range improvements. Appraisals: 120 acres at \$1,056.50; 80 acres at \$756.50; 80 acres at \$680.

4 isolated tracts, steeply sloping grazing land, 4 miles north of Manhattan. Accessible by trail over private land. No improvements. Appraisals: 80 acres at \$960; 40 acres at \$360; two 160-acre tracts at \$1,440 each.

## NEVADA

### Public Sale Tract

5 acres, one mile south of Las Vegas. Zoned for commercial use. About 2 acres usable. City utilities.

## NEW MEXICO

### Public Sale Tracts

17.99 acres, 6 miles northeast of Espanola, one mile north of State Highway 76. Gently sloping to hilly. Elevation 5,800 feet. Utilities. Appraised value \$50 per acre.

112 acres 8 miles east and 3 miles north of Milnesand. Grazing land with sandy soils. No utilities. Appraised value \$9 to \$14 per acre.

46 tracts ranging in size from .80 of an acre to 128 acres, scattered throughout Dewey County and northeastern Custer County, mostly concentrated along the South Canadian River. Grazing; mostly rough and broken uplands and sandy river floodplain with dense brush thickets. Appraised at \$25 to \$2,000 per tract or \$5 to \$25 per acre.

3 tracts, 80 acres to 240 acres, in southwestern Chaves County, 7 miles east of Pinon. Rolling, moderately steep mountain slopes. Grama grass, juniper, yucca and cholla. Grazing. Appraised value \$740 to \$2,220.

7 tracts, 40 acres to 427 acres, 2¼ miles north-northeast to 6½ miles northeast of Milnesand. Grazing with some sandy soils and some sand dunes. Appraised value \$9 to \$14 per acre.

28 tracts, ranging in size from 8 to 320 acres, scattered throughout Roosevelt County. Range land. Some tracts have shallow sandy loam, some thick sandy soils. Electricity available to some tracts. Tracts 10, 19 and 27 have good access. Appraise values range from \$11 to \$20 per acre.

43.44 acres, 75 miles southwest of Socorro, about 50 miles northwest of Truth or Consequences, N.M. Rolling grazing land. No utilities. Electric power near. Appraised value \$12 per acre.

## OREGON

Tract #1 consisting of lots 1, 2, 3, 4, 5 and 6 of Block 1, D Street, Townsite of La Grande, Oregon. Embraces an area of 520 square feet. Appraised value \$335.

Tract #2 consisting of town lots 1 and 2 of Block 2, D Street, Townsite of La Grande, Oregon, totaling 3,360 square feet. Appraised value \$200.

## SOUTH DAKOTA

### Public Sale Tract

7.95 acres, 4 miles east of Fairfax, Gregory County. Rolling. Access difficult. Traversed by 3-wire fence north-south. No utilities. Livestock and wildlife. Appraised at \$255.

## UTAH

### Public Sale Tracts

#0136779: 120 acres, 2 miles southwest of Huntington, Emery County. Mostly rolling hills, suitable for grazing. Power line and irrigation canal. Gravel road access. Appraised value \$590.

#0147220: 1 tract of 125.09 acres appraised at \$1,000; another tract of 200 acres appraised at \$2,000. Tracts located 9 miles northwest of Orderville, Kane County. No water on larger tract. Dirt road access.

## WYOMING

### Public Sale Tracts

258 acres, isolated, 15 miles north of Evanston. Adjacent to county graded road. Grazing potential. Appraised value \$3,225.

40 acres, isolated, 35 miles northwest of Thermopolis, Hot Springs County. Rough grazing. Appraised value \$640.

76 acres, 15 miles southwest of Cody, Park County. Rolling to rough grazing lands. Roads within ¼ mile. Appraised value \$1,225.

116 acres, 20 miles west of Cody, Park County. Grazing lands. Traversed by small creek. Appraised at \$3,395.

115 acres, rolling to rough, dry grazing land, 10 miles southwest of Evanston, near the Wyoming-Utah state line. County road access. Appraised at \$1,960.

## Bureau of Land Management Land Offices

### ALASKA:

555 Cordova St.  
Anchorage, Alaska 99501  
516 Second Ave.  
Fairbanks, Alaska 99701

### ARIZONA:

Federal Bldg., Room 204  
Phoenix, Ariz. 85025

### CALIFORNIA:

Federal Bldg., Room 4017  
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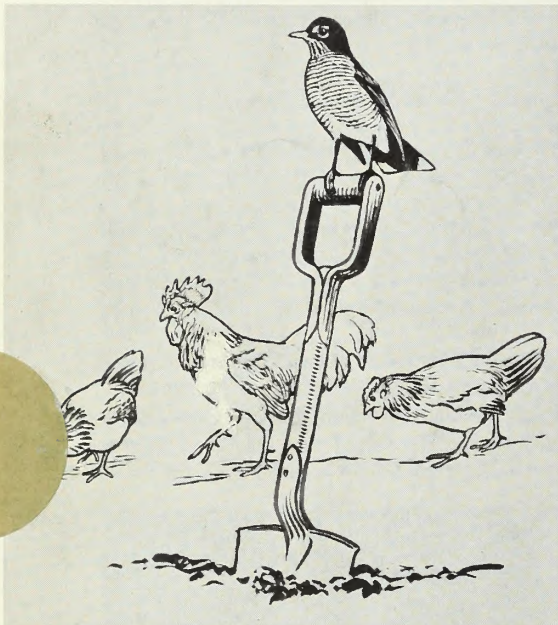
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